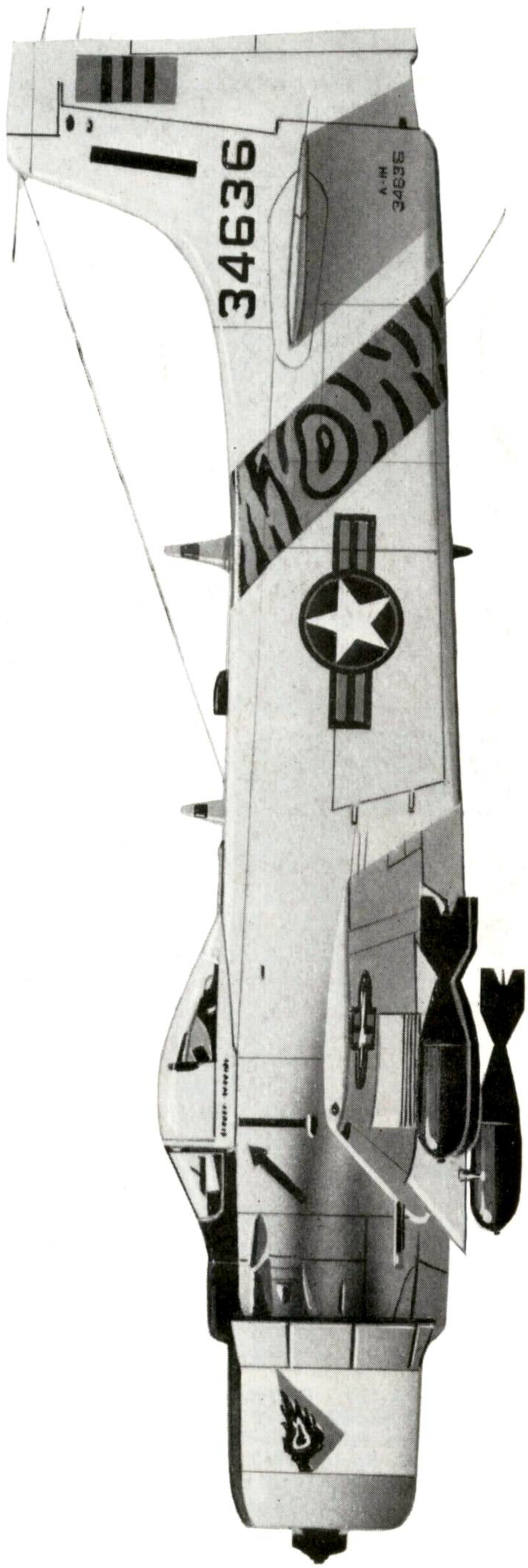
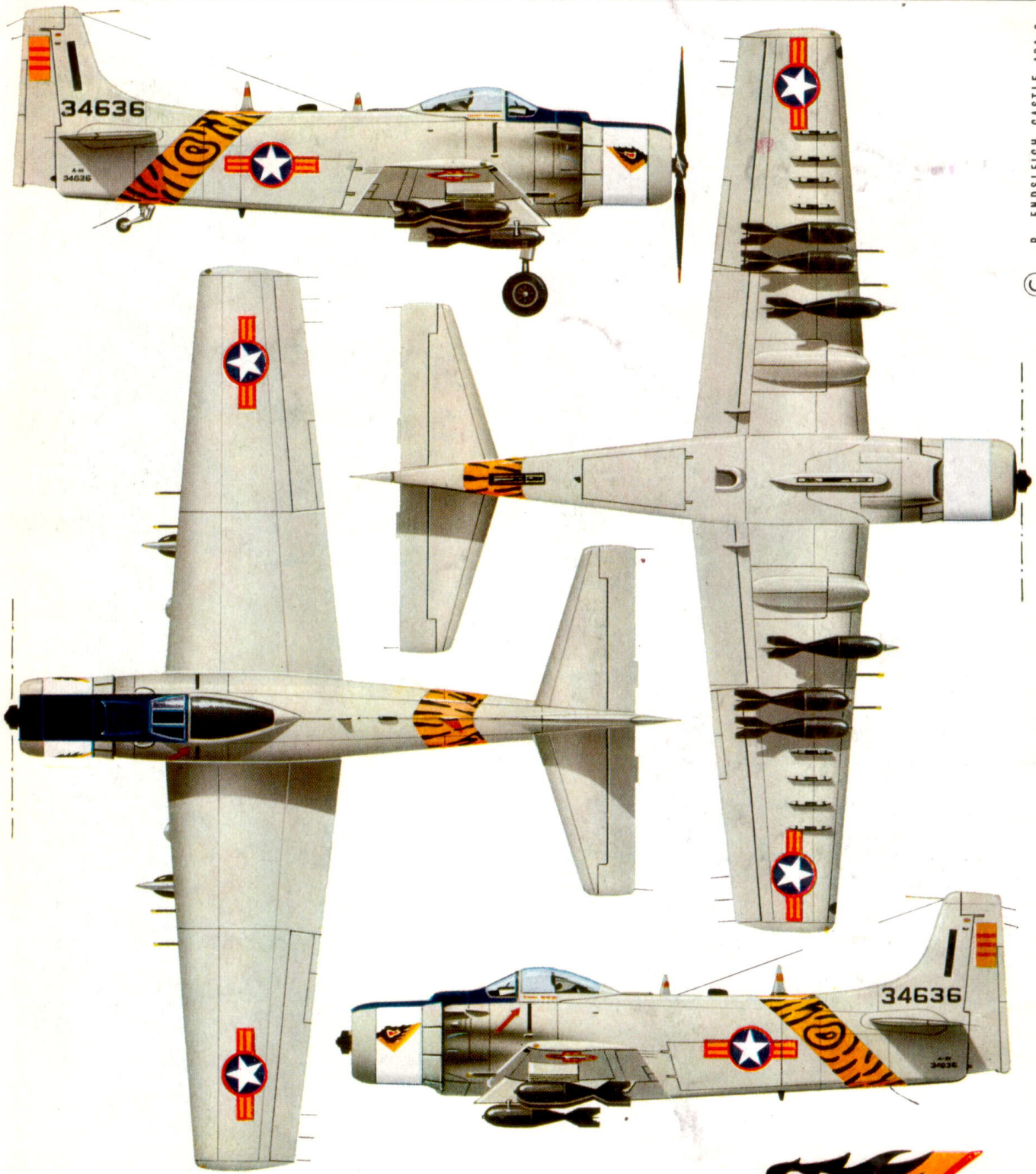
PROFILE PUBLICATIONS

The Douglas Skyraider



NUMBER 60

TWO SHILLINGS

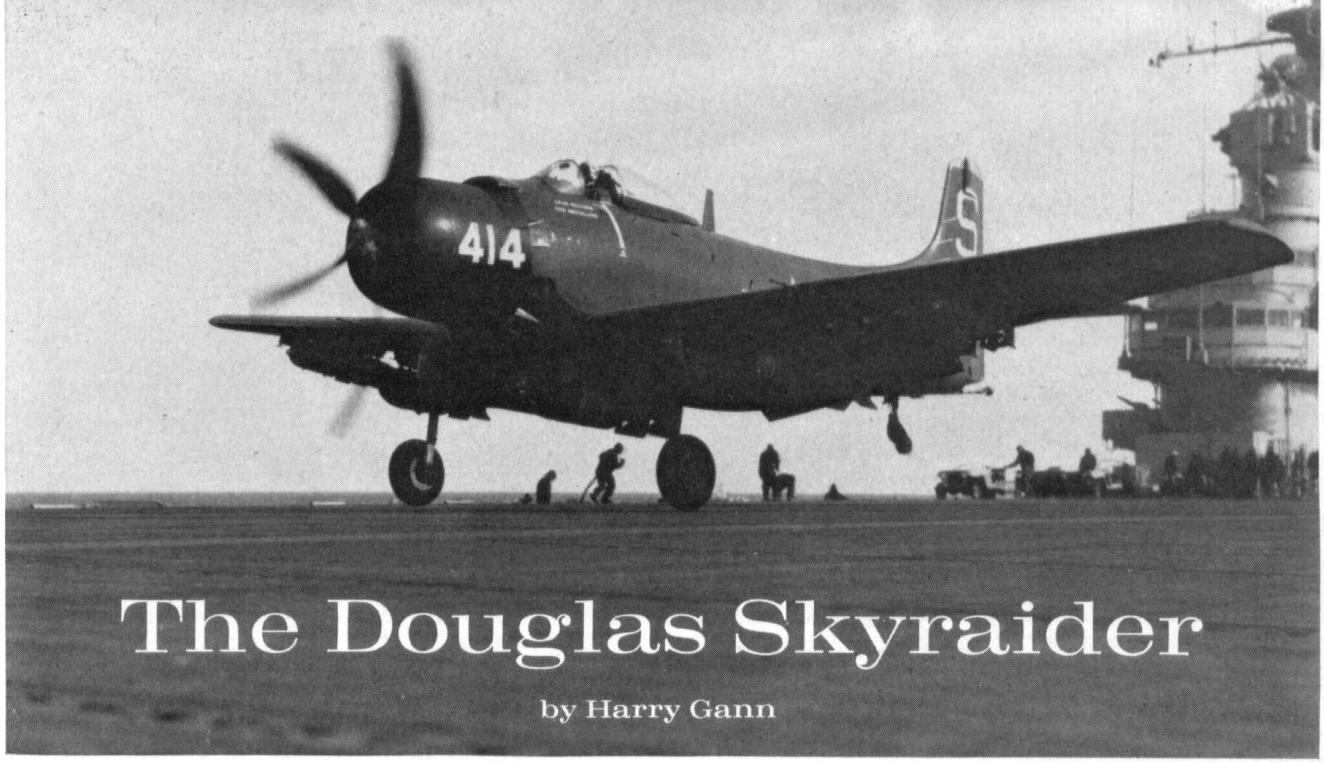


© P. ENDSLEIGH CASTLE ARAeS

DOUGLAS A-1H SKYRAIDER
(53-4636) of Republic of Vietnam Air Force, Bien Hoa, Republic of Vietnam, Spring 1965.

Eagle Head emblem on cowling.

5′ 10′



The Douglas Skyraider

by Harry Gann

An AD-4 of VF-54 taking off from the carrier U.S.S. Essex *for a strike mission over Korea.*

Dauntless II, Skyraider, BT2D-1, AD, A-1 Able Dog or Spad: Call it what you will for all of these names or designations refer to the same aeroplane. Few aircraft, like mortals, have the rare combination of qualities that result in a truly outstanding performer. No one can deny that the AD possesses these unique characteristics.

As a result of a Department of Defence directive to standardise the designation systems of the aircraft procured for the U.S. Navy, Marines, Army and the U.S. Air Force, many American military aircraft are known by more than one type of designation. The Skyraider has this multiple identity. The ADs in service in 1962 were re-identified as follows: AD-5 to A-1E, AD-5W to EA-1E, AD-5Q to EA-1F, AD-5N to A-1G, AD-6 to A-1H, and AD-7 to A-1J. The author will use either one, or both, as his fancy strikes him at the time.

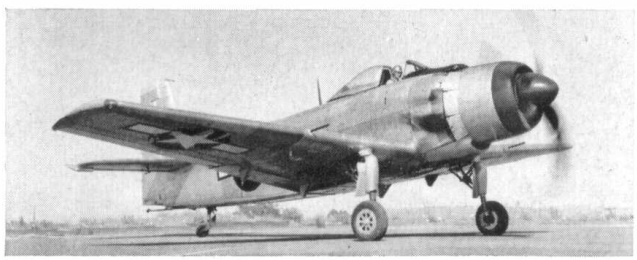
DEVELOPMENT

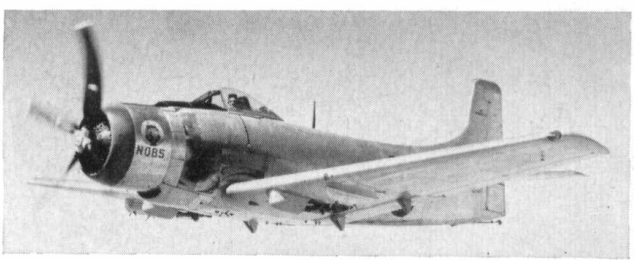
The AD was conceived in 1944 in a Washington D.C. hotel room. Douglas El Segundo Division's Chief Engineer Ed Heinemann, with his Chief Designer, Leo Devlin, and Chief Aerodynamicist Gene Root had just attended a meeting in which additional work on the BTD contract had been cancelled. The BTD, which was a modified SB2D, had been projected as a SBD replacement, but the war in the Pacific had changed so much that the initial design concepts on which the SB2D were based were no longer valid. The SB2D/BTD aircraft was better than any attack aircraft in the fleet at that time but not sufficiently so to warrant production. It was also learned that the U.S. Navy had requested proposals from two other aircraft manufacturers to supply the future attack-aircraft needs. It appeared that Ed Heinemann's organisation would be relegated to uncreative manufacturing sub-contracting, since they were not even considered a future Navy contractor.

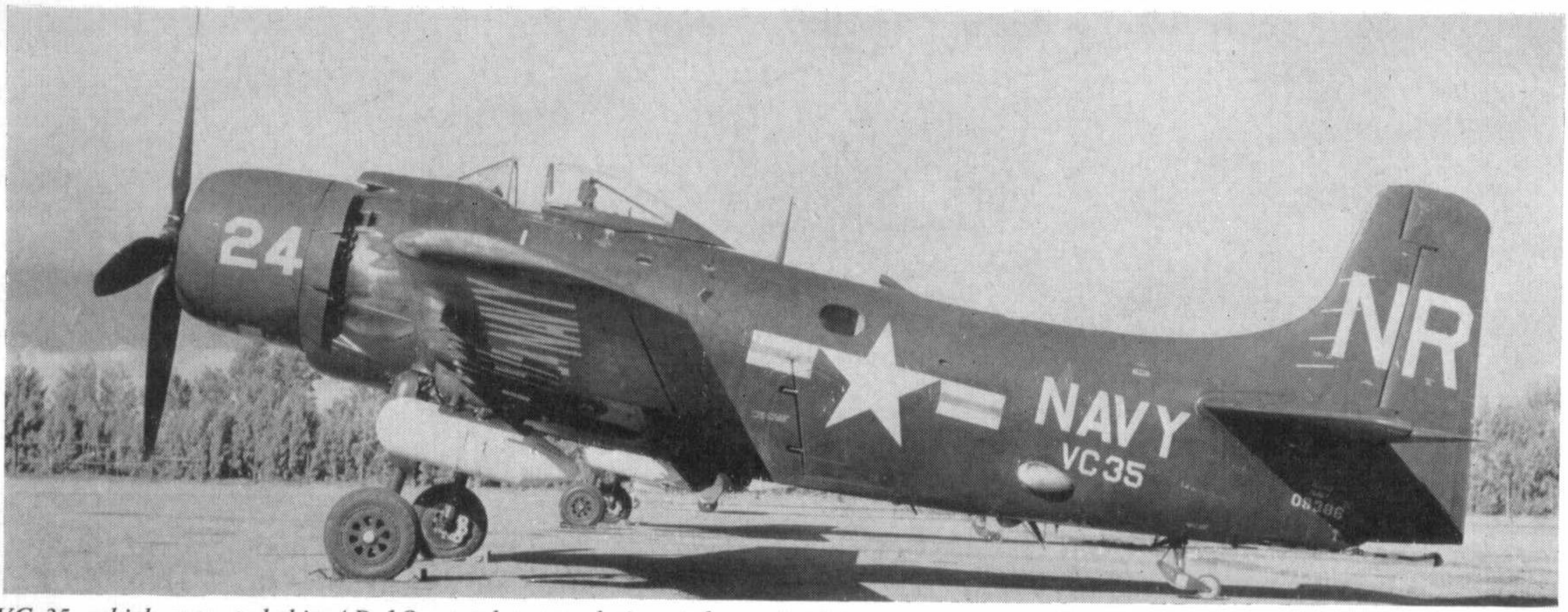
Heinemann requested the opportunity to come up with something also, but was told that there was not sufficient time as the other two contractors had already started design work. Finally, it was agreed to give some consideration to a Douglas design but only if preliminary material could be submitted immediately. Thus Heinemann, Devlin and Root retired to a hotel room to work through the night on preliminary sketches. Submitted the next day, these sketches intrigued the Navy enough that Douglas was allowed in the competition, but only if the original time schedule maintained by the other two contractors could be met.

Since the design of the SB2D/BTD aeroplane was initiated before the U.S. had entered W.W.II much of the requirement criteria used as a basis for design proved to be unrealistic. Tactics in the war in the Pacific dictated that in comparison with the SB2D/BTD aircraft, the new XBT2D-1 would: (1) require

Left: *The ADs were conceived with a massive airscrew spinner, but only this number four XBT2D-1 actually employed it.* Right: *A few of the early XBT2D-1 aircraft flew with natural metal finish for a short while during the test phase. They were designated "Dauntless II".*







VC-35, which operated this AD-1Q, was later re-designated to a VAW-type squadron coding. (Photo: the author)

shorter take-off distance, (2) have greater combat radius, (3) have greater rate of climb, (4) carry larger payload, (5) need to reduce pilot fatigue by having better stability and control. These requirements obviously meant two things: (1) more lift and (2) less weight.

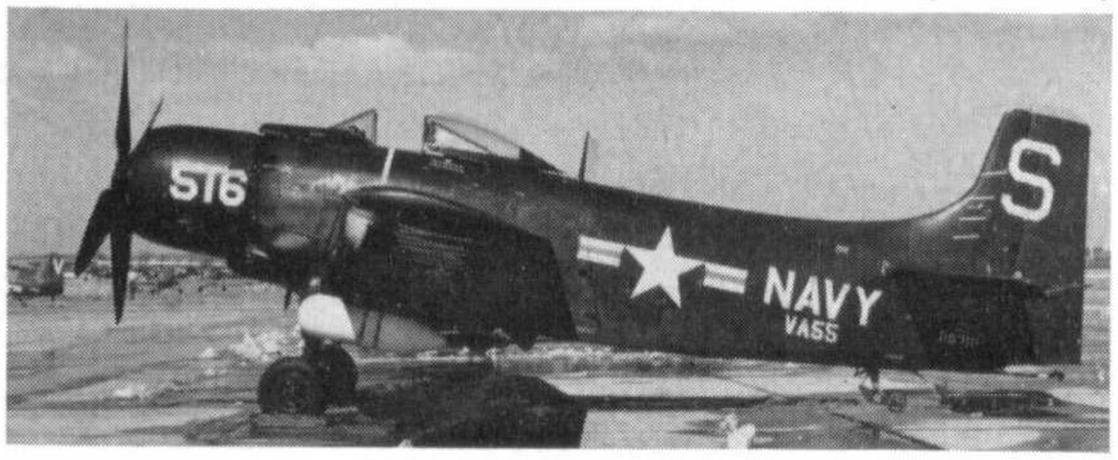
To obtain the desired lift coefficient the high-speed laminar flow airfoil sections that were becoming so publicised were rejected in favour of the proven 2400–4400 family. The loss of maximum speed in favour of higher lift coefficient was accepted and the design engineers were given the job of making up the loss by suitable detail design shrewdness.

The lighter weight requirement was met by first reducing the guaranteed design gross weight from 18,000 to 16,500 lb. To ensure that this figure would not be exceeded the designers were instructed to shoot for an additional weight reduction of 750 lb. The success of their efforts was proven by the first flight of the BT2D-1 which was made with a weight of over 1,000 lb. less than the guaranteed figure.

First flight was made on 18th March 1945 and the resulting flight test indicated that here, indeed, was a winner and a letter of intent was signed for 548 BT2D-1 "Dauntless II" aircraft on 5th May 1945. With the ending of W.W.II the quantity was reduced to 377 and shortly after to 277 aircraft. In February of 1946 the name was changed to Skyraider and in April the U.S. Navy overhauled their designation system and the BT2D-1 became the AD-1.

The versatility of the airframe was proven early in its career when various aircraft of the 25 prototype XBT2D-1 aircraft were modified to serve as prototypes for (1) Photographic, "P"; (2) Airborne Early Warning, "W"; (3) Night Attack, "N"; (4) Countermeasures, "Q"; and a spin rocket firing version.

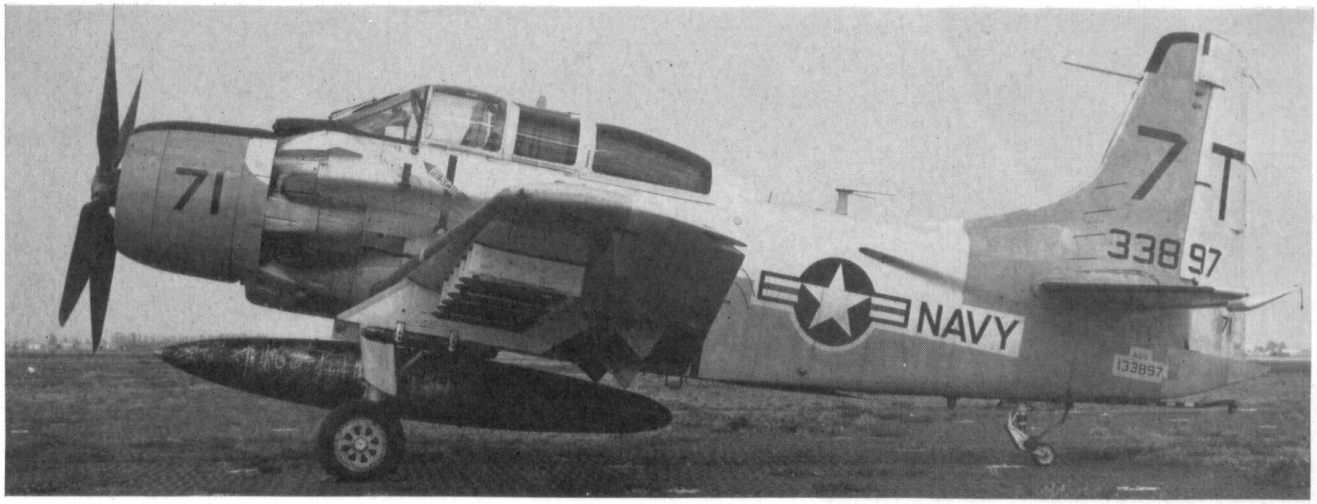
An AD-1 of Air Group Five Attack Squadron 55. The lighter AD-1 and AD-2 machines could hold their own with contemporary piston-engined fighters in friendly dog-fights.
(Photo: Clay Jansson)



Engine studies led to a proposal for installation of an improved engine with higher power. This, coupled with cockpit and control improvements and increased fuel load, resulted in a contract for the AD-2 version. Studies to couple the AD airframe to a turboprop engine were investigated in 1947 as the AD-3. These studies resulted in the XA2D-1 Allison T-40 powered aircraft and the AD-3 designations reverted to an improved AD with structural modification to strengthen the airframe. Aircraft ordered in fiscal 1948 were designated AD-4 aircraft and were equipped with improved radar, redesigned windshield and addition of an autopilot.

Below: *This AD-1 was used for mosquito abatement in the area around the Naval Air Station at Jacksonville, Florida.*

AD-1s of VA-4B. This squadron and VA-3B, both assigned to the U.S.S. Franklin D. Roosevelt, *were the first Atlantic Fleet operational AD squadrons.*



Many U.S. Naval Reserve units trained on the AD-5. The machine illustrated was used by a Seattle unit.

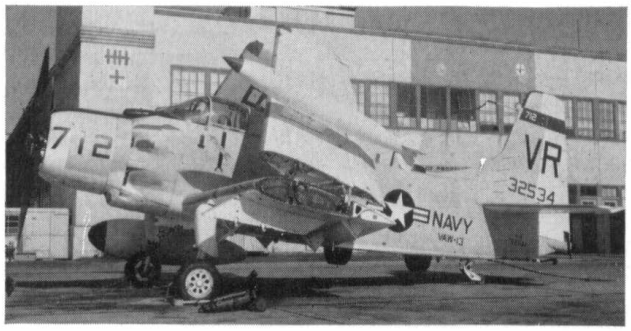
The Navy requested a study be made of the practicability of adopting the AD airframe to perform an anti-submarine mission. In early 1949 two AD-3W and AD-3N aircraft were prototyped to AD-3E and AD-3S search and attack aircraft to test the ASW concepts. However, with the improvement of the search radar it became apparent that both the search and attack capability could be built into one airframe, which resulted in a proposal for the AD-5. Although the ASW design was favourably received by the Navy no immediate action was taken.

The Red invasion of South Korea on 25th June 1950 caught the AD at a low production rate. Combat operations soon proved the Skyraider's excellent qualities. It was capable of performing any and all tasks, and was flying off the carriers with gross loads far in excess of its original overload limit of 18,000 lb. The maximum gross for service operations was soon increased to 25,000 lb. Increased production of the AD-4 was ordered, as well as the AD-5. Numerous changes were made to the ADs as a result of the Korean action.

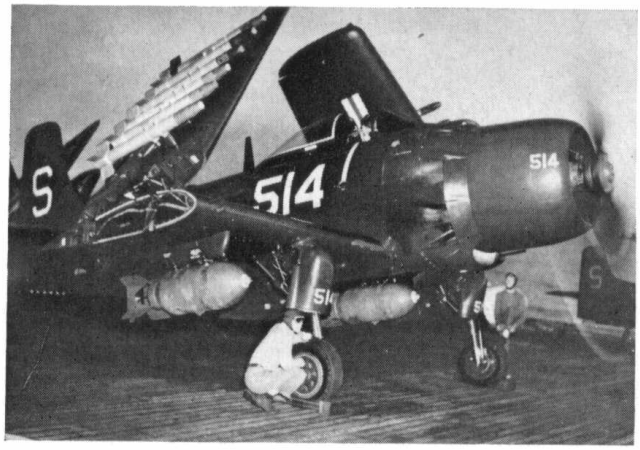
The AD-6 aircraft came into being in 1952 and was an improved AD-4B with a strengthened centre section and simplified electronic equipment. The last version, the AD-7, was ordered into production in 1955. It differed from the AD-6 by having more power and the wing fittings were re-designed to combat fatigue.

The last AD Skyraider rolled off the line and was delivered to the U.S. Navy in 1957, thus ending twelve years of production, 3,180 aircraft, 7 versions, 28 sub-versions capable of many different missions.

Below: *VAW-13 supplies the countermeasures AD-5Q aircraft for the Pacific Fleet.* (Photo: the author)



VA-55 awaits the signal to strike a target in Korea. This AD-4 is armed with twelve 5-in. rockets and two 500-lb. bombs.

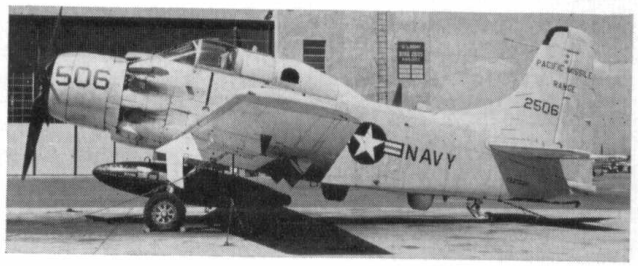


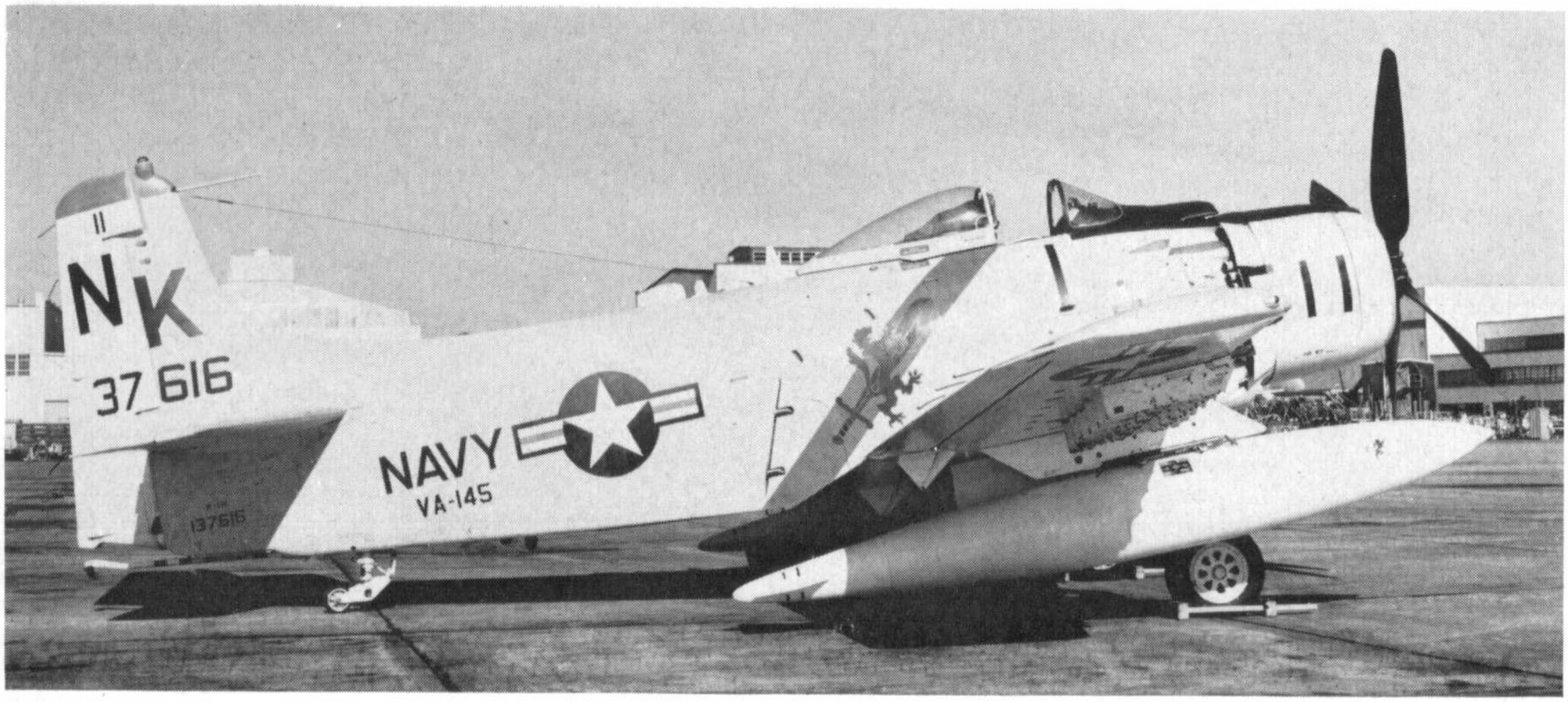
SKYRAIDER MISSIONS

The AD series were equipped to perform four major missions: day attack, all-weather attack, airborne early warning and countermeasures. However, many other missions could be accomplished such as tanker, target tow, ASW search, ambulance, passenger or cargo carrier by the installation of special equipment.

The basic mission and the job for which these aircraft were originally conceived was that of day attack. In this rôle the destruction of sea and ground targets by either dive, loft, glide or torpedo bombing, rocket or gun strafing is their objective. All of the basic seven versions were equipped for this purpose. The day-attack aircraft equipped one squadron in each of the U.S. Navy Carrier Air Groups, as well as many U.S. Marine Corps attack squadrons. With the exception of the AD-5 (A-1E) all day-attack versions were single place aircraft.

This AD-5Q from the Pacific Missile Range at Point Mugo, California, was modified to carry an AD-5W-type cockpit enclosure. (Photo: the author)





Another major function of the AD is the all-weather or night-attack mode. In this rôle they are used to seek out and destroy targets such as land or sea emplacements under the cover of restricted light. The three-man crew consists of pilot, radar operator-navigator and radar-countermeasure operator. The "N" also could be used as a bomber, torpedo or scout plane. "N" versions were delivered under the designation of XBT2D-1N, AD-3N, AD-4N and AD-5N(A-1G). In the Navy, the "N" aircraft operated aboard carriers as four-plane detachments from their mother squadron. The U.S. Marines also operated their "N"s in the VMCJ or composite squadrons in support of their line attack units.

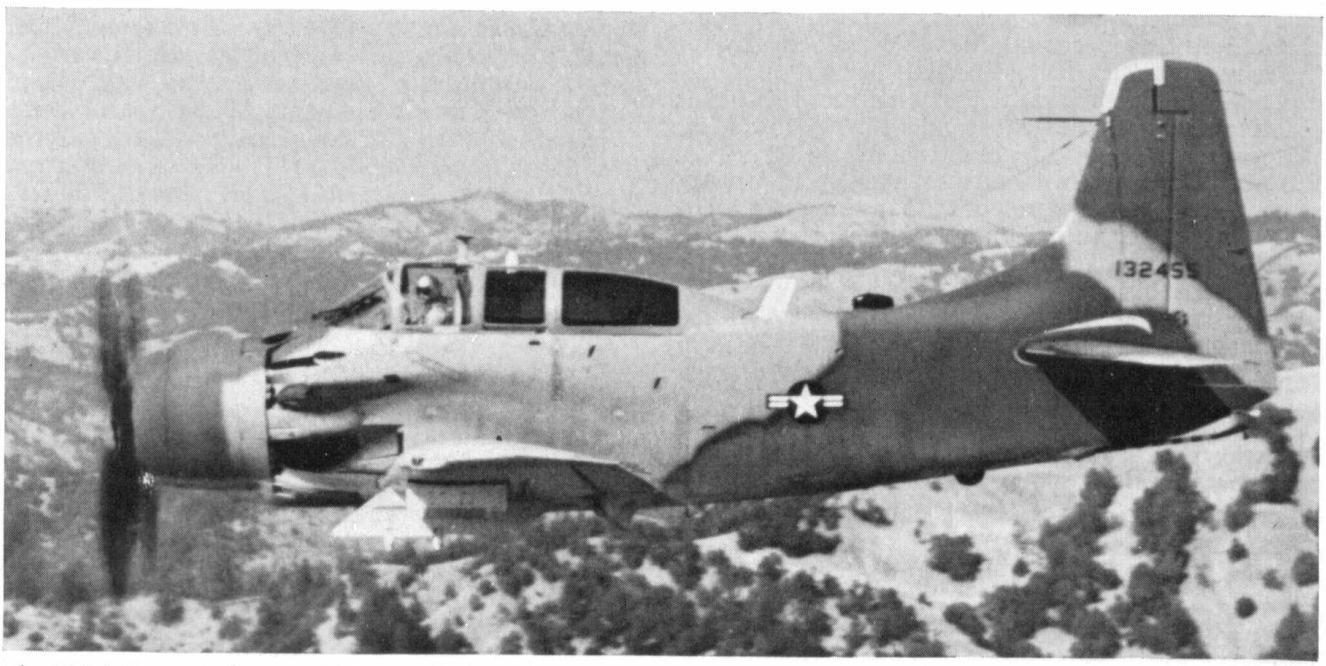
The third major function of the Able Dogs is that of "Q" or countermeasure. In this operation the two-place crew (four-place in case of the AD-5 aircraft) of pilot and ECM (electronic countermeasure) operator search out the enemy radar frequencies and then attempt to jam them. The multiplace AD-5Q uses a pilot, navigator and two ECM operators as crew. In addition to the "Q" operations, the ability to dive or glide bomb, torpedo or launch rocket attacks is not impaired. In the fleet the "Q" aircraft operate as three/four-plane detachments aboard the carriers from the mother squadron, which has been VAW-33 in the Atlantic Fleet and VAW-13 in the Pacific Fleet. "Q" versions were made of all the ADs except the AD-6 and AD-7.

One of the most important jobs of the ADs has been to provide the Fleet with early warning of enemy activity. The A.E.W. or "W" versions because of the necessary bulbous belly-mounted radar have been referred to as "guppys". Pilots on first seeing these aircraft are usually heard to mutter something about a transfer to submarine duty, but find that the handling characteristics are not adversely affected by the seemingly grotesque configuration produced by the XAD-1W (prototype), AD-3, AD-4 and AD-5 aircraft. Four-plane detachments from VAW-12 of the Atlantic Fleet and VAW-11 of the Pacific Fleet provide the carriers with the over-the-horizon-look-see.

There were also other adaptations made to the basic configurations. A self-contained in-flight refuelling tank could be mounted on the centreline station to provide 300 gallons of fuel to any of its aerial associates. A tow-target reel could also be centreline-mounted to allow target practice. A photographic

The two photographs appearing on this page contrast the markings of the same U.S. Navy Skyraider squadron over a period of seventeen years. The squadron line-up shows blue aircraft of VA-12A in 1948; the A-1H, photographed shortly after its return from a tour in Vietnam, is from VA-145, as VA-12A was redesignated.
(Photo (A-1H): Clay Jansson)

AD-6 from U.S.M.C. Reserve Squadron 12, Quantico, Virginia; shown here at Bradley Field, Conn., 1960.
(Photo: Ronald W. Harrison)



The U.S.A.F. acquired many A-1E aircraft from the Navy for "instructional flying" with Republic of Vietnam pilots. Note the camouflage scheme and small national insignia, a significant combination re-introduced on many U.S.A.F. machines in mid-1965.
(Photo: NAS Alameda)

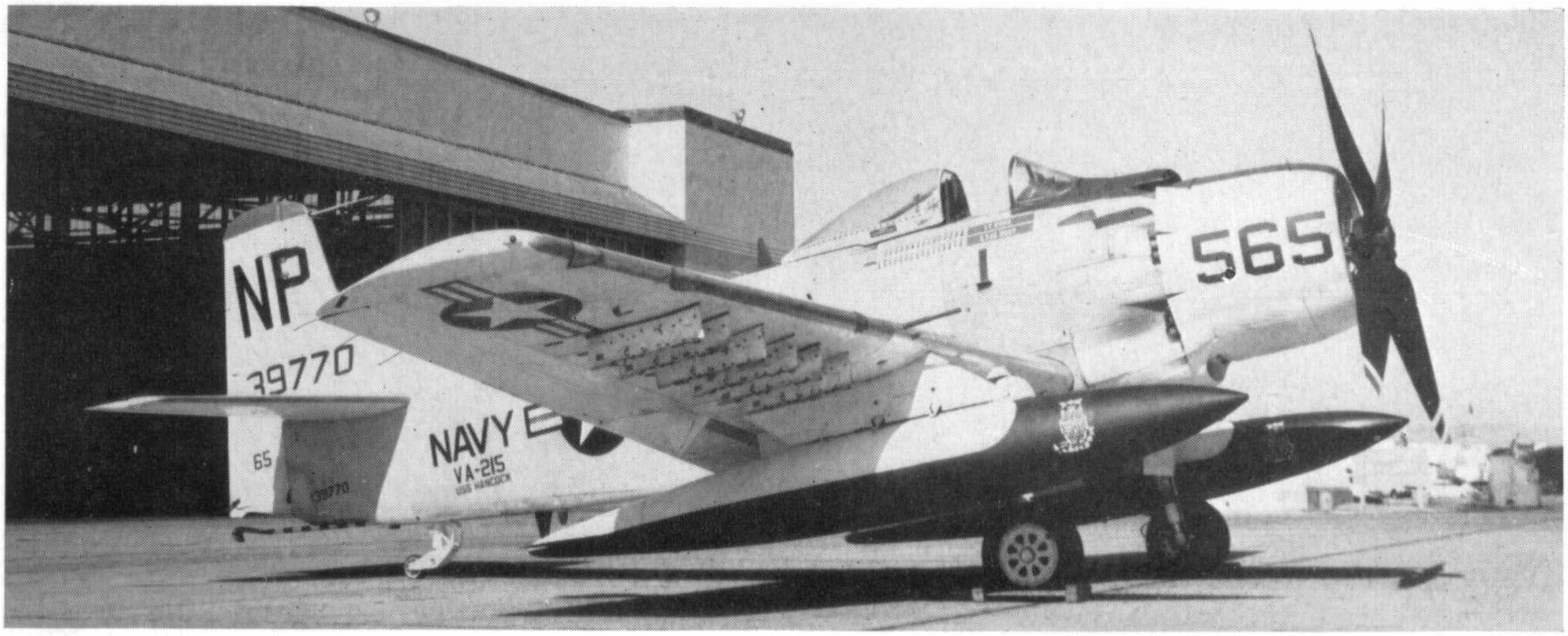
version was prototyped (XBT2D-1P), but production was not requested.

A special weapon version of the AD-4 was designated as AD-4B. This capability was carried into the AD-6 and 7 but not so designated. The low temperature operations of Korea necessitated winterising with anti-ice and de-icing equipment. These aircraft were designated AD-4L and AD-4NL. Another Korean innovation was stripping the night-attack equipment from the AD-4N to allow heavier payloads and supplement the quantities of AD-4. These aircraft were designated AD-4NA. "E" (special electronic equipment) and "S" (search) versions were prototyped on the AD-3 for the ASW mission.

THE ADs IN KOREA

The beginning of the war in Korea found the American Seventh Fleet sailing the seas of the Orient. Their mission had been to "show the flag" but with the starting of hostilities, Air Group Five aboard the carrier *Valley Forge* quickly initiated actions to carry the hostilities to the enemy.

Attack Squadron 55 (VA-55) drew the task of introducing the ADs to combat when on 3rd July 1950, AD-4 aircraft launched strikes on airfields and installations around Pyongyang. The next day, the American Independence Day Anniversary was celebrated by VA-55 by destroying a bridge span, ten locomotives and gun boats sailing on a nearby river.



Scoreboard under cockpit of this A-1H tallies combat missions against the Viet Cong. A machine of U.S.S. Hancock's *VA-215.*
(Photo: Clay Jansson)

Later in the month VA-55s pounded the Wonsan Oil Refinery so that it burned for four days serving as a navigational aid to the pilots. AD-4 aircraft of Air Group Eleven, VA-115, from the carrier *Philippine Sea* joined with VA-55 in general support of the ground troops during the Pusan Retreat. With the arrival of the U.S.S. *Leyte* carrying VA-35 from Air Group Three and the *Boxer* with VA-65 of Air Group Two, more AD4s joined the battle. In December of 1950 the Princeton's Air Group Nineteen, with VA-159 ADs performing the heavy-attack rôle, joined the fray. The full-scale activity necessitated the calling up of various reserve units, and in March of 1951 the *Boxer* and the *Bon Homme Richard* deployed to action with reserve units making up the Air Group. VA-702 from Glenview, Illinois, brought their AD-2s and were one of the units in action at the "Bridge of Toko-Ri"; VA-923 from St. Louis was also aboard the *Bonny Dick* and saw action with their AD-3s. Before the cease-fire some three years after the start of hostilities most of the U.S. Navy AD squadrons were deployed to "Westpac" for action with eight of the fourteen squadrons serving two tours of duty.

In addition to the day-attack duties performed by the line squadrons, numerous sorties were flown by AD-4N night-attack aircraft of VC-35 detachments supporting the Air Groups aboard the carriers. Carrying one 500-lb. bomb, six 250-lb. bombs, six flares and full ammunition for their four wing-mounted 20-mm. cannons, the three-place AD proved extremely effective for night heckling. Shore-based U.S. Marines of VMC-1 also used effectively the "Q" version of the ADs to ferret out the enemy's radar so that the bomb-carrying AD team-mate could rush in and destroy the emplacements.

Commanders Cagle and Manson in their book *The Sea War in Korea* summed up the AD contribution to the Korean conflict.

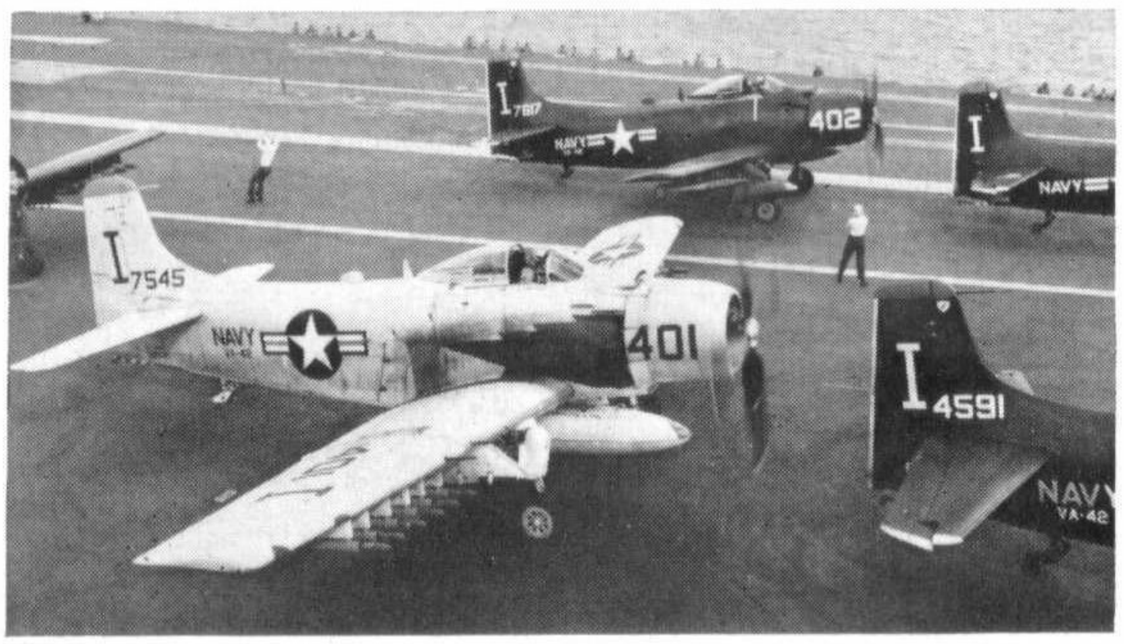
> ". . . In particular, the AD Skyraider was to be the most successful airplane of the 37-month war. Only the Skyraider could carry and successfully deliver the 2,000-pound bomb with dive-bombing precision against the target of interdictors: the bridge abutment or span, the tunnel mouth, and the cave entrance. The AD's versatility and weight-lifting capacity (as much as 5,000 pounds on a carrier mission) made it the war's outstanding performer."

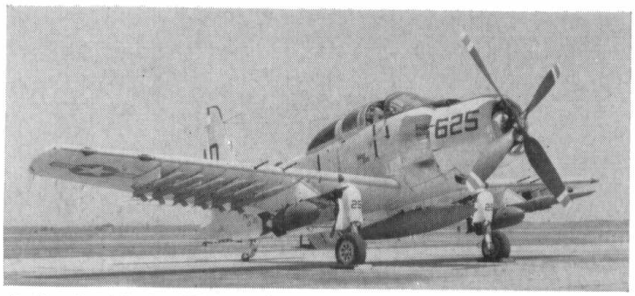
SKYRAIDER OPERATIONS IN OTHER COUNTRIES

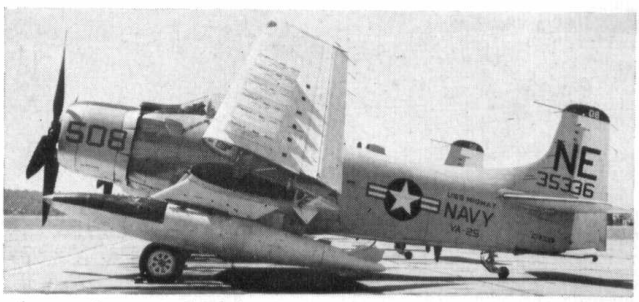
In addition to the U.S. Navy, Marine Corps and Air Force units, the AD aircraft have played a great part in the force structure of other countries. The first non-American country to receive these aircraft was Great Britain when 36 AD-4W airborne early warning aircraft were obtained for the use of the Royal Navy. Designated Skyraiders AEW 1, these aircraft were delivered to No. 778 Squadron in late 1951 for

AD-6 aircraft of VA-152 are shown with 300-gallon external tanks.
(Photo: VFP-63)

During the change-over period in U.S.N. colour schemes, many squadrons operated both blue and grey aircraft; the grey became mandatory in August 1957. Here two AD-6s of VA-42 demonstrate the diversity in markings.







Left: *An AD-5 of VA-45 demonstrates the versatility of the armament that can be carried.* Right: *VA-25, based on the carrier* Midway, *gained fame when two of the squadron's AD-6s shot down an attacking MiG 17 from North Vietnam.* (Photos: the author)

Left: *An AD-6 from the U.S.S.* Independence, *photographed at Brooklyn, N.Y., in 1959.* Right: *An A-1E used for target-towing duty at Pensicola, Florida, 1960.* (Photos: Ronald W. Harrison)

operations training. At the conclusion of the training, men and aircraft were re-assigned to No. 849 Squadron for duty aboard carriers where they operated in four-plane detachments similar to the technique used in the American Navy. These aircraft were operational until 1962 when twelve of the remaining aircraft were sold to the Swedish Air Service Ltd. for use as target-tow aircraft for the Swedish Air Force. Modification by Scottish Aviation Ltd. consisted of removal of the belly radar and radome and the auxiliary vertical stabiliser, and the installation of a target-tow reel.

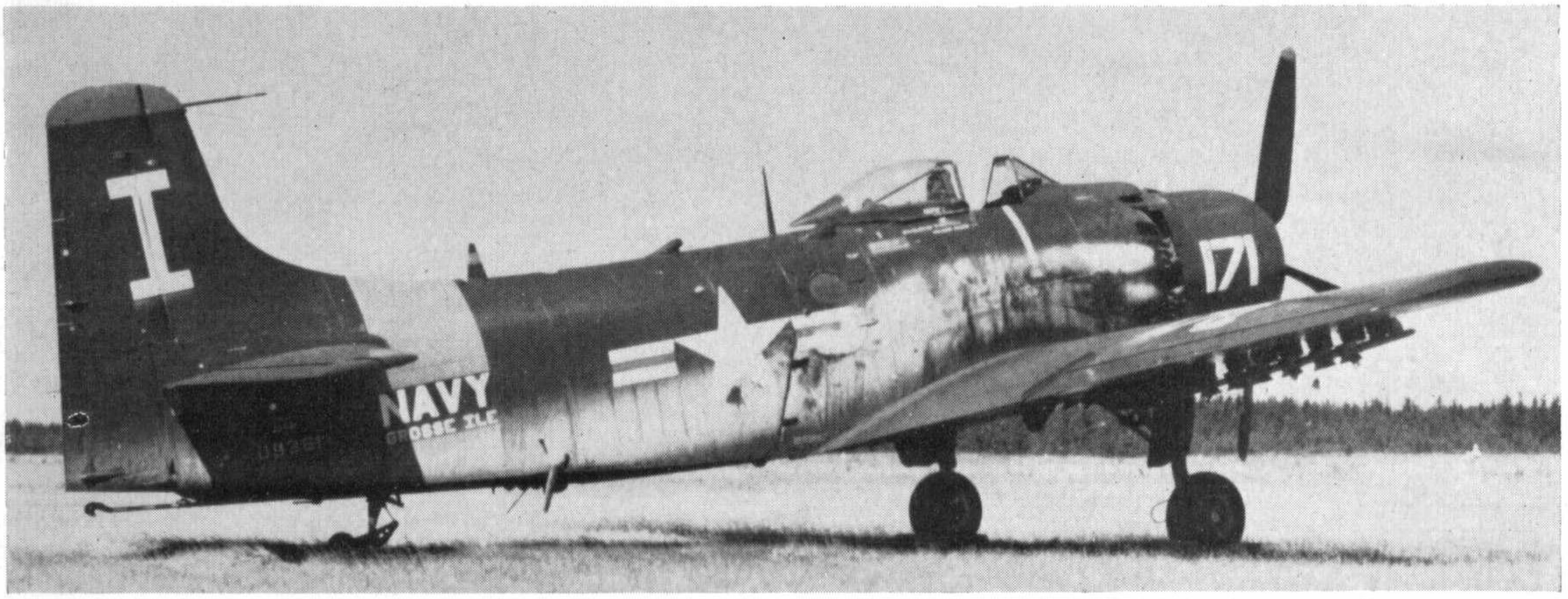
The French *Armée de l'Air* became the second European country to operate the ADs when they obtained 100 flyable AD-4 aircraft from the surplus U.S. Navy stockpile in 1959 for use in the Algerian action. Some of these aircraft were "surplused" to the Cambodian Air Force beginning in 1965.

Surplus AD-6 aircraft from the U.S. Navy stockpile at Litchfield, Arizona, were assigned to the Republic of Vietnam Air Force in late 1960 under the Mutual Defence Assistance Pact. English-speaking Republic of Vietnam pilots were trained.

VIETNAM OPERATIONS

In November 1961, the Pacific Air Force of the U.S.A.F. established the Second Air Division at Saigon to provide assistance and direct support to tactical combat operations of the R.V.N.A.F., as well as providing instructors for "on-the-job training". Since the ground rules initially established that no jet aircraft could be used and that all operations must be conducted with a Vietnamese pilot, the source of suitable aircraft presented a problem. North American T-28A piston-engined trainers were quickly modified

AD-6 aircraft were supplied to the Republic of Vietnam Air Force (South Vietnam) from U.S.N. surplus stocks. (Photo: D. O. Olson)

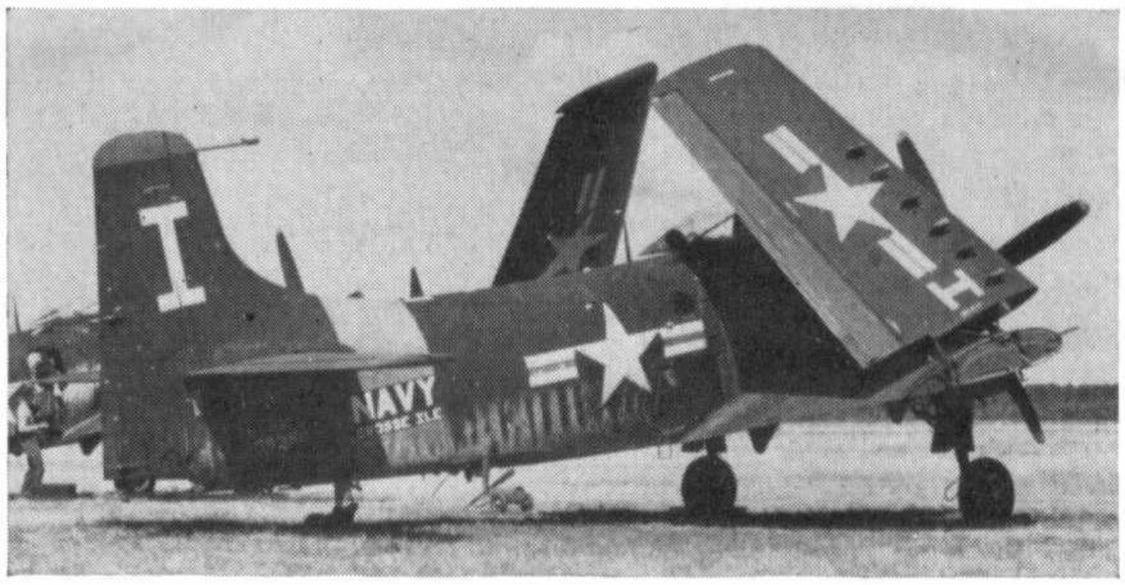


Above and below: *Interesting paint finish displayed by two Skyraiders* (09360 *and* 09361) *of U.S.N. Air Station Grosse Ile.*
(Photos: Fred C. Dickey, Jr.)

to attack aircraft and the ancient Douglas B-26 twin-engine attack planes were called in for their third war in twenty years.

The U.S.A.F. at their Special Air Warfare Centre quickly evaluated many aircraft or modified aircraft to find replacements for the T-28s and B-26s. The A-1E (AD-5) was found to be exceptionally well suited for the requirements of this particular situation and arrangements were made to obtain the U.S. Navy's inventory of the multi-place Skyraider. The aircraft were quickly run through a modification centre where dual controls (the U.S.N. A-1E had only single control), substitution of radio and navigational gear compatible with U.S.A.F. operation and other minor modifications were made. In June 1964 these aircraft were introduced to action. At the same time additional A-1H (AD-6) aircraft were sent to bolster the R.V.N.A.F.

The U.S. Navy's efforts in the Vietnam operation ceased to be that of patrol in August of 1964 when Task Force 77 was again called into action. As in the previous Korean engagement, Carrier Air Group Five was one of the first to carry the fight to the enemy. The ADs of VA-52 aboard the carrier *Ticonderoga* raided the North Vietnam P.T. boat bases after an unprovoked attack on U.S. destroyers at the Gulf of Tonkin. Aiding Air Group Five was another Korean veteran; Air Group Fourteen aboard the *Constellation.* This air group had been created from various reserve squadrons during the Korean war, and their AD squadron VA-145 was a direct descendant of VA-702. As the Naval action stepped up the carriers *Coral Sea*, *Ranger* and *Hancock* joined the 7th Fleet to relieve the *Ticonderoga* and *Constellation.* The *Coral Sea* with

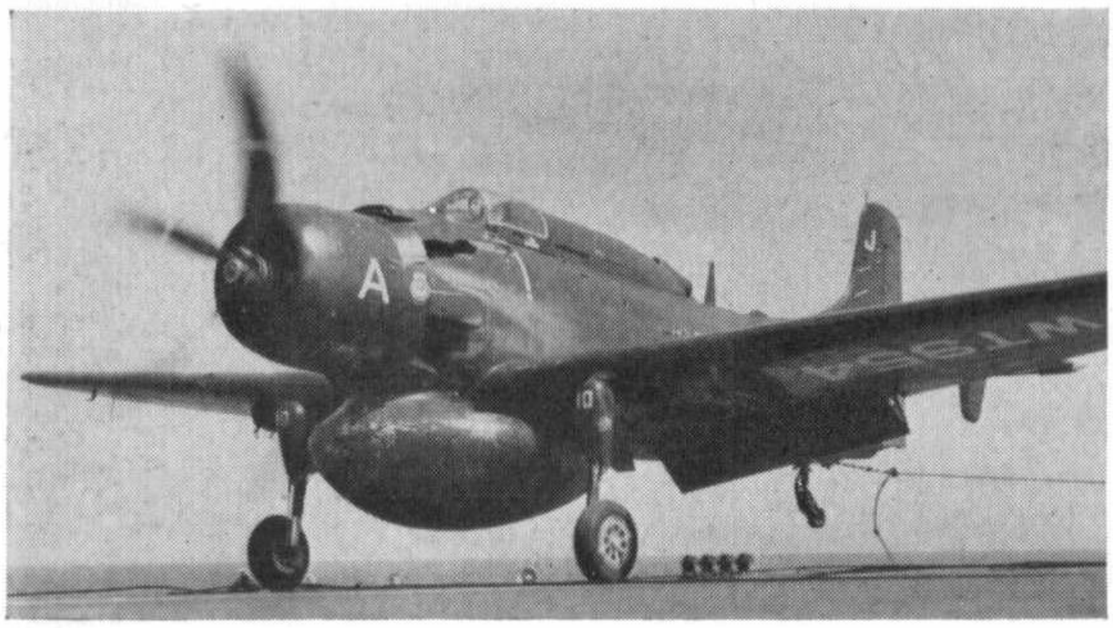


VA-152 of Air Group Fifteen, the *Ranger* with Air Group Nine's VA-95 AD squadron and the *Hancock* with VA-215 of Air Group Twenty-one continued to exert pressure on the Viet Cong guerrillas in support of the combined U.S. and Republic of Vietnam forces. When the carrier *Midway* joined the fray, with its Air Group Two on board, VA-25 brought smiles to the Spad enthusiast when a four-plane element of ADs knocked down a MiG 17 after a pair of the Russian-built jets had attacked them during a reconnaissance mission over North Vietnam by the ADs.

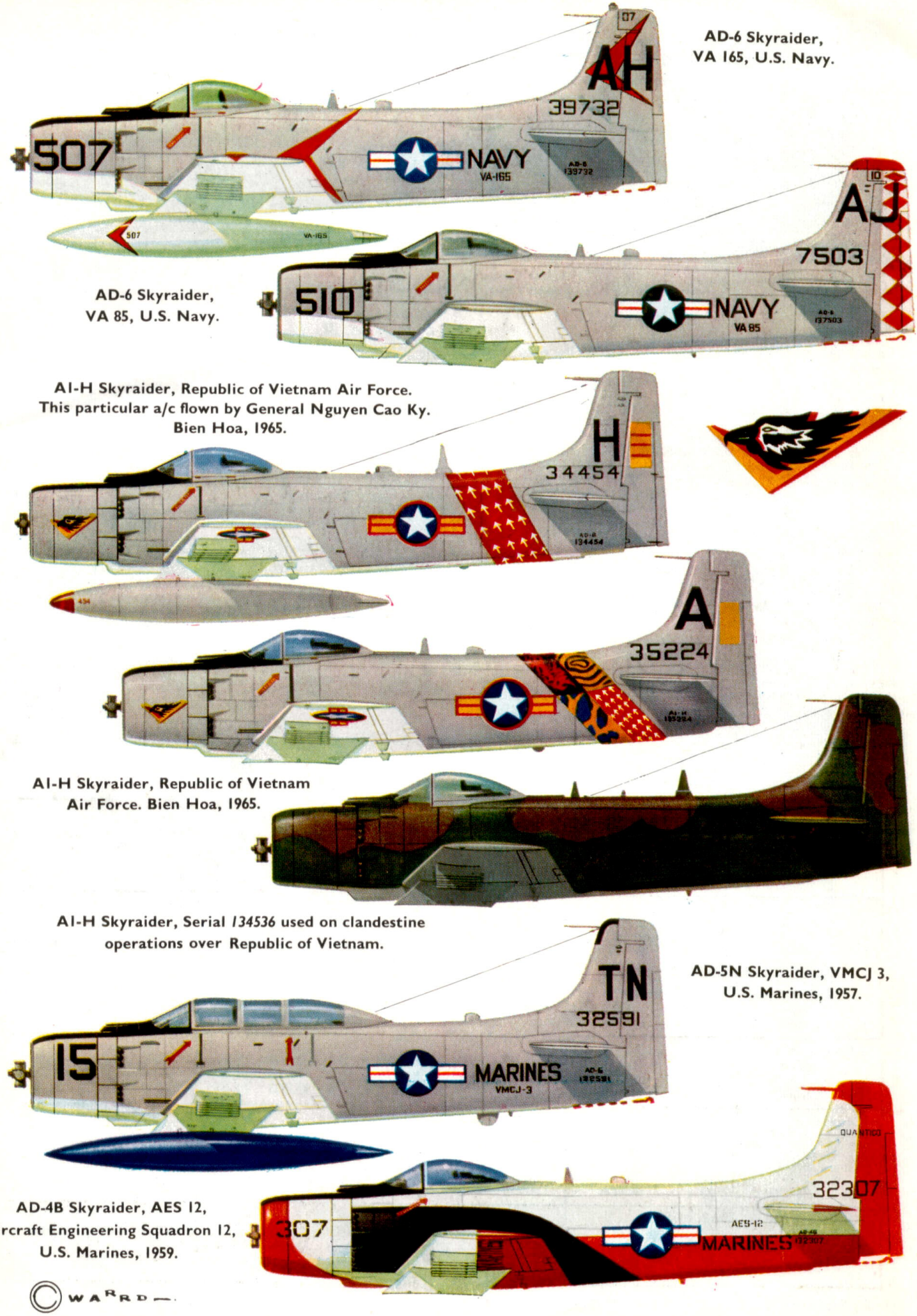
The rôle played by the AD in Vietnam has provoked much thought about re-opening the production line. Since the last AD was delivered in 1957, the reserve stocks have been depleted with their combat usage by the Republic of Vietnam, U.S.A.F. and U.S. Navy forces. The available stock would not be sufficient for a sustained period of combat. Whether a suitable replacement will be found in the "Coin" aircraft remains to be seen. Many Spad pilots still believe that a suitable AD replacement is a brand new AD.

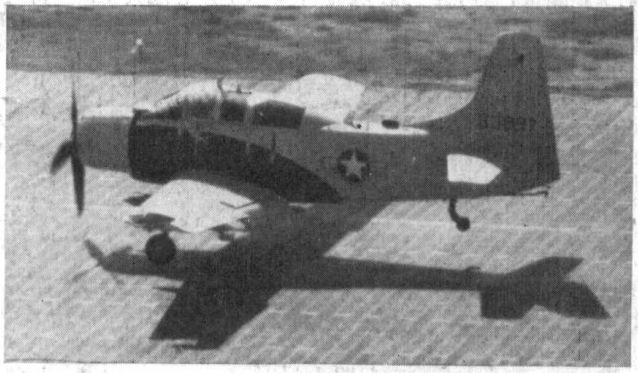
© *Harry Gann, 1965*

WT 954 *at the moment of arrest; a Fleet Air Arm AEW 1 Skyraider "landing on".* (Photo: "Flight")



AEW 1 (AD-4W) of 849 Sqdn. Royal Navy taxis on the flight deck of H.M.S. Victorious. *Cowling motif shows a wasp on a white field.* (Photo: "Flight")


AD-6 Skyraider,
VA 165, U.S. Navy.
AH
39732
507
NAVY
VA-165
AD-6 Skyraider,
VA 85, U.S. Navy.
AJ
7503
510
NAVY
VA 85
AI-H Skyraider, Republic of Vietnam Air Force.
This particular a/c flown by General Nguyen Cao Ky.
Bien Hoa, 1965.
H
34454
A
35224
AI-H Skyraider, Republic of Vietnam
Air Force. Bien Hoa, 1965.
AI-H Skyraider, Serial 134536 used on clandestine
operations over Republic of Vietnam.
AD-5N Skyraider, VMCJ 3,
U.S. Marines, 1957.
TN
32591
15
MARINES
VMCJ-3
AD-4B Skyraider, AES 12,
Aircraft Engineering Squadron 12,
U.S. Marines, 1959.
QUANTICO
32307
307
AES-12
MARINES



Left: "*Everything down*". *An AD-5N of U.S. Marine Corps Composite Squadron VMCJ-3 in the landing regime.* Right: *An A-1E lands on a prefabricated Republic of Vietnam airstrip with wing-tip battle-damage from Communist ground fire.*

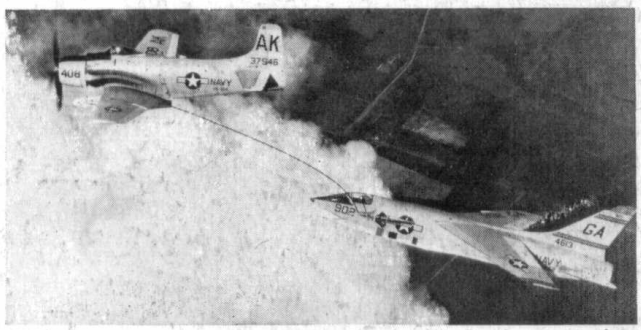
PRODUCTION DETAILS

XBT2D-1: 25, Bu. Nos. 09085–09109.
AD-1: 242, Bu. Nos. 09110–09351; *AD-1Q:* 35, Bu. Nos. 09352–09386.
AD-2: 156, Bu. Nos. 122210–122365; *AD-2Q:* 22, Bu. Nos. 122366–122387.
AD-3: 125, Bu. Nos. 122729–122853; *AD-3Q:* 23, Bu. Nos. 122854–122876; *AD-3W:* 31, Bu. Nos. 122877–122907; *AD-3N:* 15, Bu. Nos. 122908–122922.
AD-4: 372, Bu. Nos. 123771–124006, 127844–127879, 128917–129016; *AD-4N:* 307, Bu. Nos. 124128–124156, 124725–124760, 125707–125764, 126876–127018, 127880–127920; *AD-4W:* 168, Bu. Nos. 124076–124127, 124761–124777, 125765–125782, 126836–126875, 127921–127961; *AD-4Q:* 39, Bu. Nos. 124037–124075; *AD-4B:* 165, Bu. Nos. 132227–132391.
AD-5: 212, Bu. Nos. 132478, 132392–123476, 132637–132686, 133854–133929; *AD-5N:* 239, Bu. Nos. 132477, 132480–132636, 134974–135054; *AD-5W:* 218, Bu. Nos. 132729, 132730–132792, 133757–133776, 135139–135222, 139556–139605; *AD-5S:* 1, Bu. No. 132479.
AD-6: 713, Bu. Nos. 134466–134537, 135223–135406, 137492–137632, 139606–139821.
AD-7: 72, Bu. Nos. 142010–142081.

CONVERSIONS

From: To
XBT2D-1: *XBT2D-1P*, 1, Bu. No. 09096; *XBT2D-1N*, 2, Bu. Nos. 09098–09099; *XBT2D-1Q*, 1, Bu. No. 09109; *XAD-1W*, 1, Bu. No. 09107; *XAD-2*, 1, Bu. No. 09108.
AD-1: *AD-2 pilot ship*, 1, Bu. No. 09195.
AD-2: ——
AD-3: *AD-4 pilot ship*, 1, Bu. No. 122853.
AD-3W: *AD-3E*, 2, Bu. Nos. 122906–122907.
AD-3N: *AD-3S*, 2, Bu. Nos. 122910–122911.
AD-4: *AD-4B*, 37, Bu. Nos. 127854–127860, 127866, 127868–127872, 128937–128943, 128971–128978, 134005–134018; *AD-4L*, 63, Bu. Nos. 123935, 123952–124005, 127845–127852; *AD-5 pilot ship*, 1, Bu. No. 124006.
AD-4N: *AD-4NA*, 100, Bu. Nos. 125742–125764, 126876–126883, 126903–126925, 126947–126969, 126988–127010; *AD-4NL*, 38, Bu. Nos. 124153, 124725–124760.
AD-4W: *AEW.1*, 36, WT943–WT969, WV102–WV107, WV179–WV–180.
AD-5N: *AD-5Q*, 53 kits supplied for modification.

The publishers gratefully acknowledge the valued assistance of Mr. David W. Menard in the preparation of some of the colour illustrations appearing in this Profile.



A tanker AD-6 of VA-104 extending the range of a Chance Vought (L-T-V) Crusader F-8.

AD SPECIFICATIONS

Versions	Engine	Dimensions			Weights			Performance		
	Wright R-3350	Span	Length	Height	Empty	Design Gross	Over Load	Max.	Service Ceiling	Combat Range
Day Attack:		ft.	ft.	ft.	lb.	lb.	lb.	k.	ft.	n.m.
XBT2D-1	24W	50	39·5	12	10,500	15,000	16,700	325	26,000	1,350
AD-1	24W	50	38·5	12	10,560	16,000	18,000	310	26,000	1,350
AD-2	26W	50	38·5	12	10,579	16,000	18,300	328	27,500	1,386
AD-3	26W	50	38·5	12	10,800	16,000	18,300	325	27,000	1,300
AD-4	26WA	50	38·5	12	11,712	16,700	24,000	315	36,500	1,110
AD-5	26WA	50	40	13·9	12,293	17,000	25,000	270	26,000	1,044
AD-6	26WA	50	39·2	12	11,302	15,600	25,000	285	28,500	1,143
AD-7	26WB	50	39·2	12	12,094	15,600	25,000	285	28,200	1,128
All-Weather:										
AD-3N	26W	50	38·5	12	11,564	17,000	18,300	315	26,500	1,300
AD-4N	26WA	50	38·5	12	11,400	17,400	24,000	305	36,000	1,100
AD-5N	26WA	50	40	13·9	12,112	17,000	25,000	260	25,000	1,135
Countermeasure:										
AD-1Q	24W	50	38·5	12	10,970	17,000	18,900	300	24,500	1,250
AD-2Q	26W	50	38·5	12	11,200	17,000	19,143	321	26,600	1,301
AD-3Q	26W	50	38·5	12	11,600	17,000	18,300	305	36,000	1,100
AD-4Q	26WA	50	38·5	12	11,600	17,000	24,000	305	36,000	1,100
AD-5Q	26WA	50	40	13·9	12,097	17,000	25,000	270	27,000	1,182
Airborne Early Warning:										
AD-3W	26W	50	38·5	12	13,000	16,500	18,300	300	27,000	1,300
AD-4W	26WA	50	38·5	12	12,600	17,500	24,000	305	36,000	1,100
AD-5W	26WA	50	40	13·9	12,092	17,000	25,000	260	27,000	1,294

© Profile Publications Ltd., P.O. Box 26, 1a North Street, Leatherhead, Surrey. Printed by Hills & Lacy Ltd., London and Watford.